

Chapter 1. Purpose of and Need for Action

1.1 Introduction

The Bureau of Reclamation (Reclamation) has authority for maintenance of the Rio Grande river channel between Velarde, New Mexico, and Caballo Reservoir under the *Flood Control Acts of 1948 and 1950* [33 United States Code (U.S.C.) 701s, 701f-2]. Under this authority, Reclamation monitors locations where there is danger of river erosion causing damage to levees, roads, ditches, and other riverside facilities; these locations are referred to by Reclamation as “priority sites.” One priority site that has been identified is called the Sandia Priority Site (Figure 1), hereinafter referred to as the “project area.”

1.2 Proposed Action

The Federal action addressed in this Environmental Assessment (EA) would be the funding and execution of river channel alignment activities at the project area by Reclamation. The proposed action would reconstruct a portion of the east river bank of the Rio Grande and realign the river channel at this location. The reconstruction and realignment would protect the integrity of the east levee and canal system, and prevent severe damage to these facilities and possible flooding. A majority of the proposed action would occur on Pueblo of Sandia lands. Some additional lands encumbered by the proposed action are on properties conveyed by the Middle Rio Grande Conservancy District (MRGCD) to the United States under the terms of the 1951 Contract between the parties. This EA has been prepared in accordance with the National Environmental Policy Act (NEPA) [42 U.S.C. 4321, et seq.].

1.3 Need for the Action

At the present time the Rio Grande is eroding the east river bank at the project area, allowing the river channel to be undesirably close to critical irrigation and flood-control facilities. The Rio Grande is less than 100 feet from the levee at the Sandia Priority Site. Short-term, pre-emergency activities, in the form of riprap placement along the east river bank, were implemented in 2003 (TetraTech 2002). At high flows the east river bank could continue to erode, possibly breaching the east levee system and flooding private, Pueblo of Sandia, and Middle Rio Grande Project facilities. Threatened and endangered species are also of concern along this portion of the Rio Grande.

1.4 Purpose of the Action

The project area is located in Bernalillo (Sandoval County), New Mexico, approximately 10 miles north of Albuquerque, New Mexico (see Figure 1), along the Rio Grande within the Pueblo of Sandia (centered at Lat. 35°18'36", Long. 106°33'36"). The purpose of this project would be to prevent damage to the east levee system by reducing the probability that high flows will cause further erosion of the east river bank. This action would also provide additional bank stability and reliability at the project area. A secondary purpose of the project would be to take advantage of opportunities provided by the proposed action to restore, improve, and enhance, to some degree, habitat for threatened and endangered species at the project area.

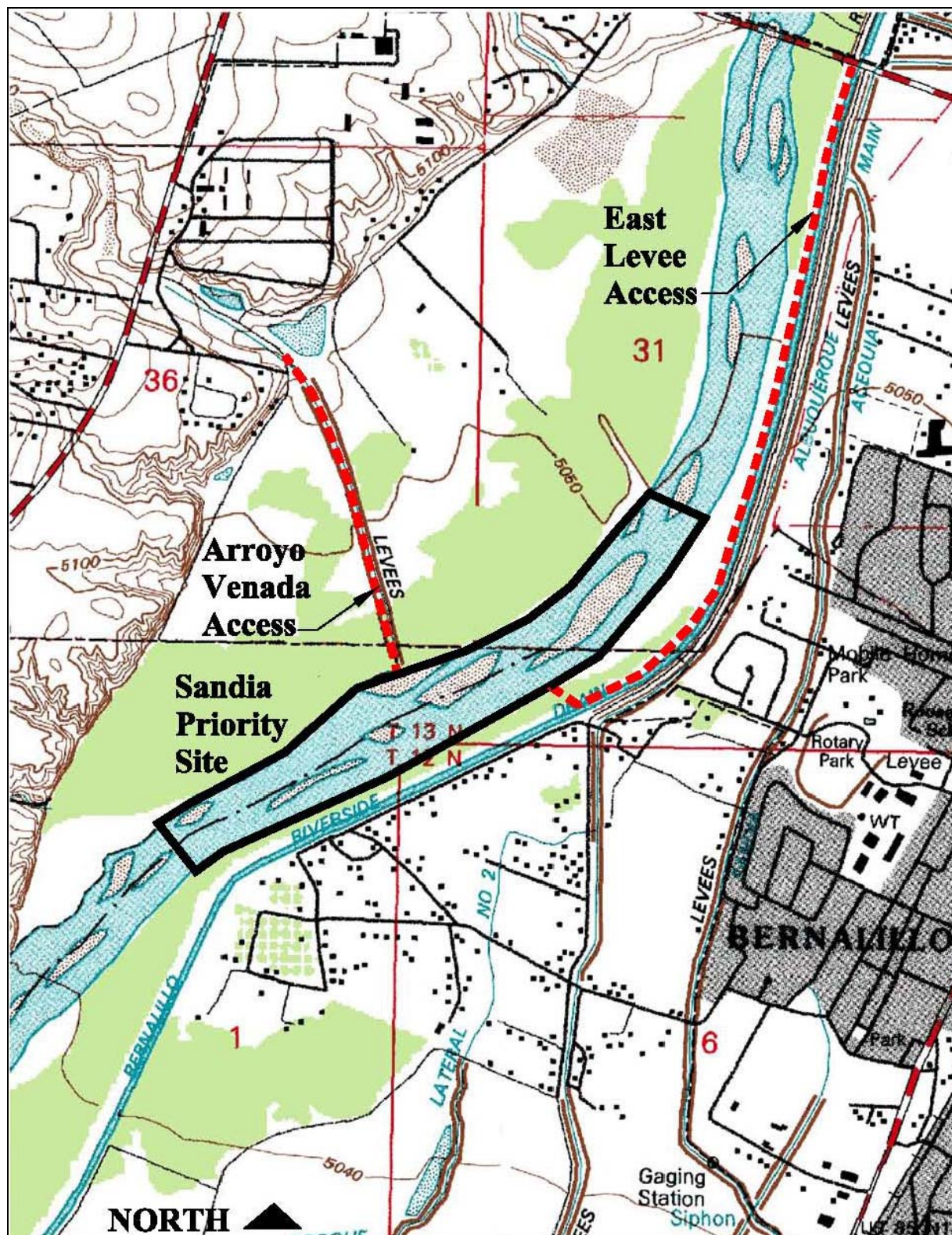


Figure 1. Sandia Priority Site (project area) location map.

1.5 Relevant Statutes, Regulations, and Other Plans

The proposed action does not conflict with any known State or local planning or zoning ordinances. The proposed action would also be required to conform to the provisions of Section 7 of the Endangered Species Act (ESA) as administered by the U.S. Fish and Wildlife Service (Service) and Section 106 of the *National Historic Preservation Act* (NHPA) as administered by the New Mexico State Historic Preservation Officer (SHPO).

Reclamation would need to secure a Section 401 Certification and a Section 404 Permit for this project to meet the requirements of the Clean Water Act (CWA). Because more than 1 acre of land would be disturbed by the proposed action, the project would require a Section 402, *National Pollution Discharge Elimination System* (NPDES), Permit.

For the purpose of analyzing cumulative effects, two other planned projects in the vicinity of the project area were identified. One project would involve construction and alignment of the Rio Grande at the Bernalillo Priority Site location just 0.5 mile northeast of the project area. Reclamation is planning to construct both the Bernalillo and Sandia Priority Site Projects at approximately the same time to take advantage of common access and equipment staging. The Bernalillo Priority Site Project is discussed further in Chapter 2. The other project is being undertaken by the Southern Sandoval County Arroyo Flood Control Authority (SSCAFCA) at the mouth of Arroyo Venada and involves construction of approximately 600 feet of earthen berm, 1 to 3 feet in height, as a water quality treatment pond near the river. A separate environmental permitting process for this project is being pursued by SSCAFCA.

1.6 Agency and Public Scoping Activities in Support of the Environmental Assessment (EA)

Reclamation sent a letter to the Governor of the Pueblo of Sandia asking if the Tribal Council would like to hold an internal scoping meeting for their tribal members. However, the Pueblo of Sandia did not respond to Reclamation's letter.

Reclamation has consulted directly with the Pueblo of Sandia and the Service to identify their issues and concerns. A field trip was conducted on March 30, 2005, with Service personnel to review existing conditions at the project area. Consultation with the Pueblo of Sandia consisted of an initial consultation letter briefly describing the project and location, and requesting comments. A meeting was held with Pueblo of Sandia staff on January 6, 2005, to discuss possible design alternatives for the project. On May 25, 2005, Reclamation staff presented the four alternatives advanced for further study to the Pueblo of Sandia Tribal Council. The Pueblo of Sandia Tribal Council later approved one of these alternatives, which Reclamation subsequently designated as the preferred alternative for the Sandia Priority Site.

Other agencies and groups consulted by Reclamation for this EA included the U.S. Army Corps of Engineers (ACOE), New Mexico Environment Department (NMED), New Mexico Department of Game and Fish (NMDG&F), the New Mexico Rare Plant Technical Council (NMRPTC), the SHPO, the Environmental Protection Agency (EPA), the Bureau of Indian Affairs (BIA), the MRGCD, and Native American tribes.

Scoping and consultation resulted in the identification of nine issues that would need to be addressed by the proposed action. They are:

- the potential for impacts to protected species;
- the resultant effects to native wildlife from the removal of existing cottonwood trees (*Populus* spp.), willows (*Salix* spp.), and other vegetation within the project area;
- the potential for introduction of State-listed noxious weeds;
- the potential for erosion-related water quality impacts during construction and after construction;
- air quality from dust generation during construction;
- the avoidance of cultural and archaeological resources, as well as potential sacred sites in the project area;
- the avoidance of Indian Trust Assets (ITAs);
- the potential for any adverse effects to low-income and minority populations; and
- the effects to visual resources as a result of construction activities.

With regard to Federally protected species, three were identified that could potentially occur in the project area: the bald eagle (*Haliaeetus leucocephalus*), the southwestern willow flycatcher (*Empidonax traillii extimus*), and the Rio Grande silvery minnow (*Hybognathus amarus*). Bald eagle looking for nesting or roosting sites could potentially be disturbed by construction activities at the project area. Protocols for monitoring bald eagles, as described in Chapter 4, would be employed during construction to mitigate this potential impact.

The Pueblo of Sandia, following Service-approved protocols, has been surveying the project area for southwestern willow flycatchers since 2002 and no birds have been detected. According to on-site surveys conducted in 2005 for the presence of southwestern willow flycatcher habitat, no potential suitable habitat exists in the project area. In addition, clearing and grubbing operations for construction would take place before the nesting season to further ensure no southwestern willow flycatcher are affected.

Partial dewatering of the main channel for construction after flow is diverted into the secondary channel could “adversely affect” individual Rio Grande silvery minnow that become stranded in small disconnected pools. However, the construction techniques used with refugial pool management in the proposed action are designed to minimize contact with the Rio Grande silvery minnow and the potential for harm or harassment. There would be no effects to the Rio Grande silvery minnow’s designated critical habitat. Reclamation would continue to coordinate with the Service on whether Rio Grande silvery minnow should be transported away from the project area.

The following issues were not considered relevant to the project discussed in this EA.

- No social or economic effects are expected to occur as a result of the proposed action.
- There are no segments of designated Wild and Scenic Rivers in the vicinity of the project area that could be affected by the proposed action.
- Jurisdictional wetlands in the project area that would be affected by the project would be mitigated on-site.
- No changes in the land use would occur as a result of the proposed action.
- No permanent effects to recreation activities are expected as a result of the proposed action.